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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,387

08/04/2006

Mauro Zenobi

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22859

7590

06/04/2009

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EXAMINER

COMINGS, DANIEL C

ART UNIT

PAPER NUMBER

3744

MAIL DATE

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06/04/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/588,387	<b>Applicant(s)</b> ZENOBI, MAURO	
	<b>Examiner</b> Daniel C. Comings	<b>Art Unit</b> 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: The specification should not make reference to the claims. As such, the forth and fifth paragraphs of page 2 should be deleted or edited to remove references to the claims.

Appropriate correction is required.

Examiner respectfully requests that applicant review the following listing of the content of a specification and adjust the specification of the instant application to include the required sections labeled with appropriate titles. For further guidance, applicant may wish to refer to the US Patent documents cited as references in this Office action.

### **Content of Specification**

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United

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States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
  - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention

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described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

- ...
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

### ***Claim Objections***

Claims 12-22 are objected to because of the following informalities: The word "comprise" on line 20 of claim 12 should be "comprises". The teaching in line 18 of claim 12 of "bag identification means" lacks antecedent basis.

The phrase "the cell code is independent of the level on which the cell is located" on line 8 of claim 12 should be amended to read "the cell code is independent of the level on which the cell which it identifies is located" to clarify and provide antecedent basis for the recitation of "the cell".

Appropriate correction is required.

Note that the teachings on line 10 of the cell identification means being "preferably bar codes" and on line 12 of the movement system "preferably rotating" the cells have not been granted patentable weight by the examiner. The word "preferably"

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renders these limitations optional and thus not required for the construction or practices of the invention. Should applicant desire for these limitations to be granted weight, the word “preferably” must be removed (and replaced with grammatically appropriate language to prevent further informalities.)

Claims 13-22 are objected to as being dependent upon objected base claim 12.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites in line 20 “...characterized in that it further comprise[s]...” but does not clearly indicate which component or system is indicated by the word “it”. This lack of clarity renders the claim indefinite. For purposes of examination, the examiner has interpreted this “it” to refer to the apparatus rather than to any of its components.

Claims 18 and 21 each claim some component (a thermal control sub-system and a software element, respectively) that are independent of the processing system and yet interconnected with the processing system (in communication with it in the case of claim 18 and actuated by it in the case of claim 21).

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Because the components are claimed as being independent yet interconnected with the processing system, the claims are rendered indefinite as it is unclear how such a relation can be implemented.

Claims 12-17, 19-20 and 22 are rejected as being dependent upon rejected base claim 12.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-14 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Publication No. DE 44 18 005 A1 to Scheuer in view of US Patent No. 6,109,053 to Strackbein et al.. (Note that all page and paragraph references to Scheuer are to the machine translation obtained by the examiner from the European Patent Office website.)

Scheuer teaches limitations from claim 12, an apparatus for receiving, preserving and supplying bags of blood, comprising:

a cabinet (called a cupboard in the Derwent abstract) for containing all the components of the apparatus,

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a refrigerated space for containing the bags (the cupboard is taught to be cooled by air coming through the center of the turntables),

a magazine comprising a plurality of cells (the positions on the turntables in which a unit may be placed), each capable of containing a single bag (unit), the magazine being housed inside the refrigerated space, each of the cells being identified by a cell code (binary codes), and wherein the cells are structured in superposed levels (the turntables are taught to be vertically stacked), the cell code is univocal (implicitly, as a code having multiple meanings would increase the chances of misstorage or mislocation of units), the cell code is independent of the level in which the cell is located and of the position of the cell in the level (no such dependency is suggested by Scheuer) and wherein cell identification means capable of retrieving and/or containing cell codes are placed at the cells (the binary codes are taught to be stored to allow rapid identification and access, thus implying that the storage is performed by the associated),

at least one door (the hatch) for allowing access by an operator to the cells,

a movement system housed inside the cabinet and capable of moving, preferably rotating, the cells (the motors driving the turntables and drawing units from the turntables to the hatch),

a cooling system (the pipe providing cooling air) housed inside the cabinet,

a processing system (the associated computer) housed inside the cabinet, capable of controlling the movement system (as taught in the first paragraph of pg. 2) and the cooling system (implicitly),



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a reading device for reading bag identification means, said device being connected to the processing system (the reader), housed inside the cabinet and placed at walls of the cabinet, (such placement is implied by the teaching of the units being read as they are stored and withdrawn, thus implicitly teaching the reader to be near the hatch and thus the walls)

characterized in that it further comprises

at least one reading device (the reader) for reading cell identification means and connected to the processing system, and at least one corresponding movement member for said reading device controlled by the processing system (second motor drive moves units past the reader), said device and said member being housed inside the refrigerated space (the reading is taught to be prior to withdrawal.) (Abstract and the second to last and third to last paragraphs of pg. 2.)

Scheuer does not teach the presence of a separate compartment for the cooling and processing systems. The inclusion of a separate compartment in a refrigeration device is well known in the art as illustrated by Strackbein. Strackbein teaches in fig. 1 shown on pg. 9 of this action, a modular housing for a refrigeration device having refrigeration components (15.3) (embodied as an air conditioner) arranged in compartments separate from the compartment to be refrigerated (within body 10) and also an additional air conditioner 40.1 (not shown in fig. 1) in the separate roof housing (40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scheuer with the separate machinery compartment of

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Strackbein and further to place the processing system within that compartment because the placement of heat generating components outside of the refrigerated space allows the temperature in the refrigerated space to be controlled more easily thus raising the efficiency of the system.

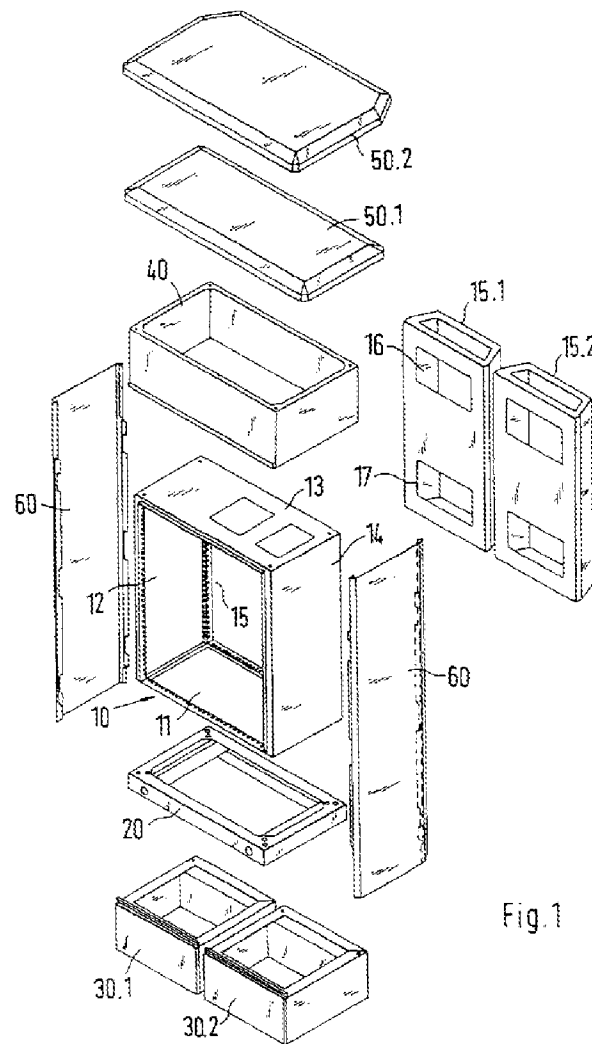
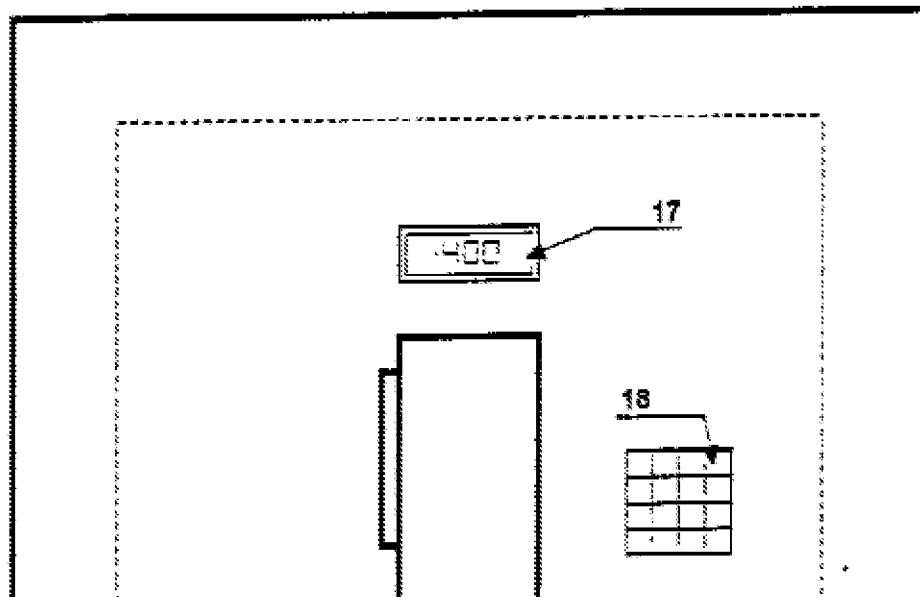


Fig. 1



**Fig. 2x**

Scheuer teaches limitations from claim 13, an apparatus according to claim 12 wherein the processing system is capable of controlling the receiving, preservation and supply (Scheuer's invention is taught for receiving, preserving (by cooling) and dispensing units of blood in the Abstract) of the bags and is connected to a keyboard (in the last paragraph of pg. 1) and a screen (in the first paragraph of pg. 1), both placed at the walls of the cabinet (as shown above in fig. 2x, a section of Scheuer's fig. 2, enlarged by examiner.)

Regarding claim 14, neither Scheuer nor Strackbein teaches the housing in which processing system is located being made of metal. It has been held that choosing from a finite number of identified, predictable solutions (such varieties of materials out of which to construct a housing) with a reasonable expectation of success is a matter of routine skill in the art. See KSR, 82 USPQ2d at 1396 and MPEP 2141 III Rationales to Support Rejections Under 35 U.S.C. 103. Furthermore one of ordinary

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skill in the art at the time the invention was made would have found it obvious to construct the housing of metal because metal materials provide good strength and durability and are relatively easy to form into various shapes as necessary for the specifications of the housing being constructed and because metals and alloys thereof are known having a variety of properties so that one may be selected to meet the specific requirements of the construction.

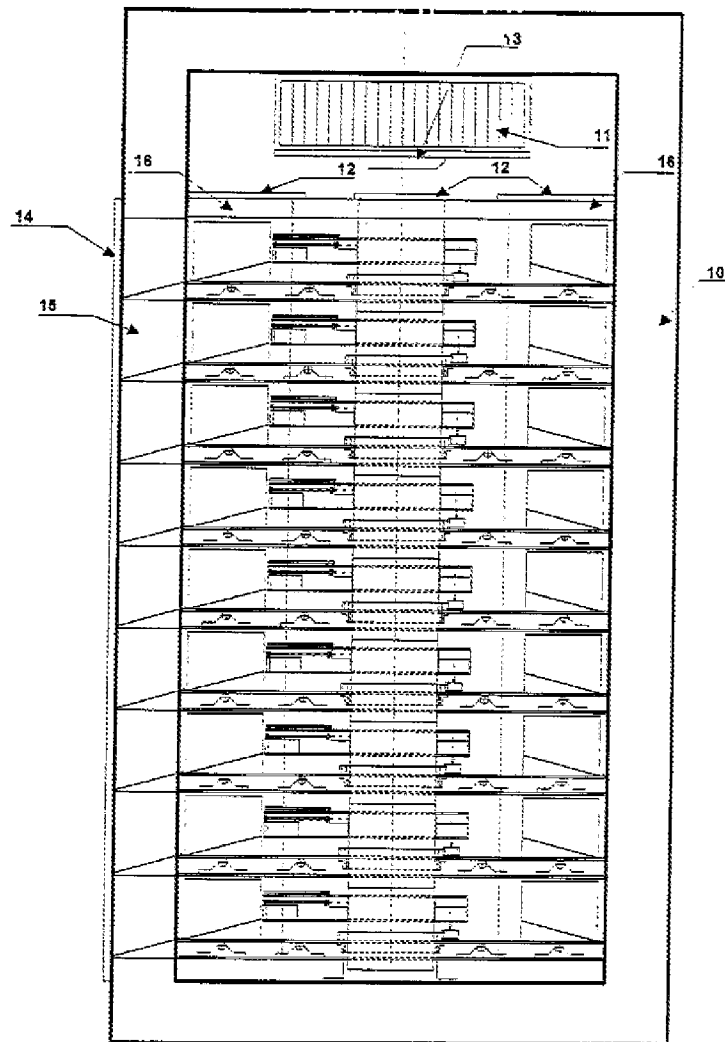
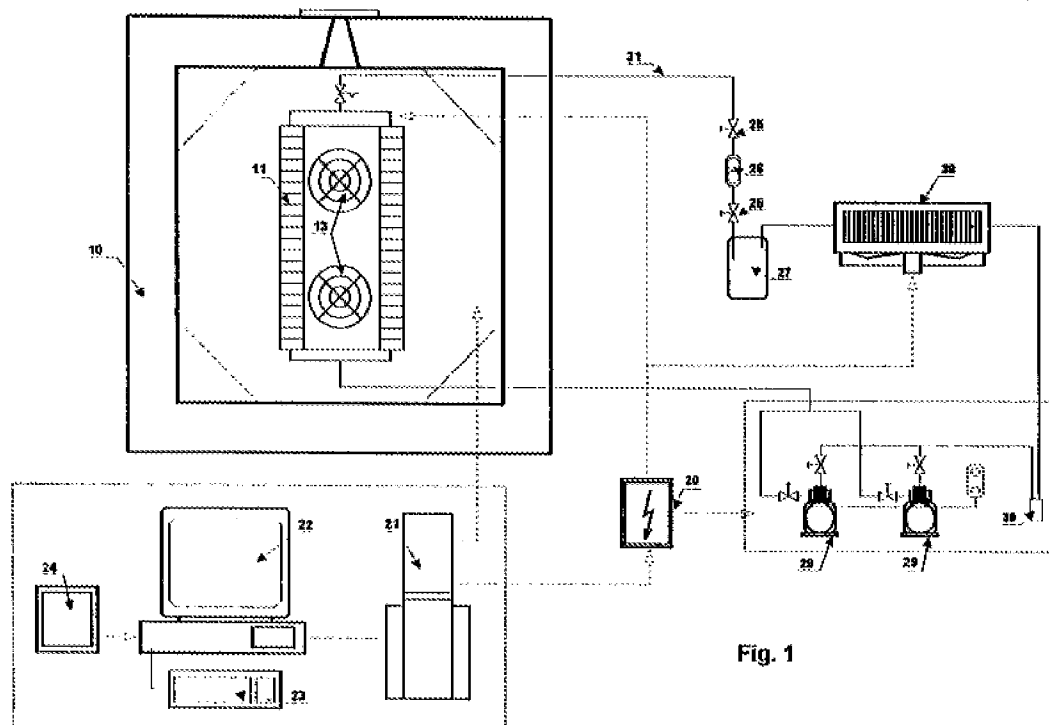


Fig. 3

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Scheuer teaches limitations from claim 17 in fig. 3, shown above, an apparatus according to claim 12 comprising only one door (14) which extends from the first to the last level of the magazine (as shown) and wherein the movement system is capable of rotating a single level at a time (Scheuer teaches in the second paragraph of pg. 3 that the turntables are capable of turning in different directions from one another, thus implicitly teaching that they can be independently controlled.)

Regarding the teaching of one cell on each level being notional, Scheuer does not teach the presence of such notional cells. One of ordinary skill in the art would have found it to be an obvious mechanical expedient to provide the system with such notional cells in which blood units are not stored and thus provide space for additional equipment, for example sensors for individually monitoring each of the levels to provide more accurate and efficient temperature control.

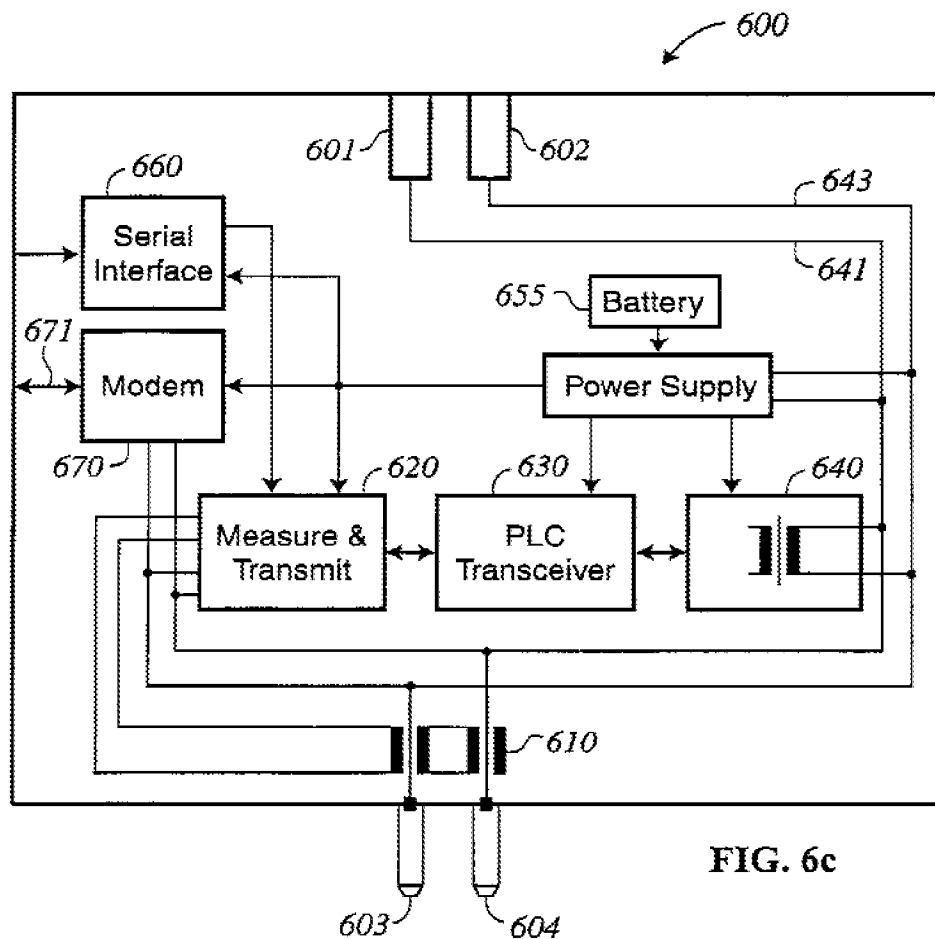


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Scheuer teaches limitations from claim 18, an apparatus according to claim 12 wherein the processing system comprises a sub-system for thermal control of the refrigerated space (teaches a programmable controller for the cooling system being located in cabinet 20 in fig. 1, shown above, in the second to last paragraph on pg. 3), said sub-system being independent of, but in communication with, the processing system (the cabinet 20 is shown to be in communication with the computer at 22 but no control by the computer is disclosed.)

Regarding claim 19, Scheuer does not teach the sub-system having an emergency power source. The use of an emergency power supply in a refrigeration device is well known in the art as illustrated by Strackbein. Strackbein teaches a refrigerator cabinet having a receptacle for a battery to provide emergency power and does not teach this power being provided for any specific portion of the refrigeration apparatus thus implicitly teaching it to be available for all electrically powered components. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scheuer with the emergency power supply of Strackbein in order to ensure that even in the event of a power failure the risk of spoilage of the goods (in this case, the blood) inside the refrigeration device is minimized.

Claims 15, 16 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheuer and Strackbein as applied to claim 12 above, and further in view of US Patent No. 6,453,689 B2 to Sharood et al..



Regarding claims 15 and 16, Scheuer does not teach the system having a wireless network port or wireless modem. The use of such wireless connection components is well known in the art as illustrated by Sharood. Sharood teaches in fig. 6c, shown above, a system for remotely monitoring a refrigeration system, the monitoring system having a modem (670) taught in lines 40-45 of col. 10 to optionally be wireless. One of ordinary skill in the art at the time the invention was made would

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recognize that the modem would also serve as a port for connecting the device to a computer network (such as via a telephone connection) and that thus this modem satisfies the limitations of both claims 15 and 16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scheuer with the modem of Sharood in order to allow for remote control and monitoring of the refrigeration system thus greatly increasing the convenience and usefulness of the system.

Regarding claims 20-22, Scheuer does not teach the system having a communication module, the communication module being actuated by the control program or the system having a fixed interface. The use of such a communications system is well known in the art as illustrated by Sharood. Sharood teaches a system for monitoring a refrigeration device, the system being connected to the device's controller (2630 as per lines 42-47 of col. 27) and being adapted to transmit data via a modem network (as described in the rejections of claims 15 and 16 on pp. 13-14 of this action and in col. 27, lines 42-51.) Furthermore, Sharood teaches a number of user interfaces for the control and monitoring system in col. 11, lines 1-5 and does not teach the interface changing and thus implicitly teaches that it is fixed in one of the forms taught. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Scheuer with the communication system and interface of Sharood in order to simplify the monitoring and control of the refrigeration device and also allow for remote monitoring thus increasing the convenience for the user.



### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent No. 6,688,123 B2 to Felder et al. teaches an automated storage system for biological samples for holding such sample at low temperatures on a movable holder

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel C. Comings whose telephone number is 571-270-7385. The examiner can normally be reached on Mon-Fri 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Jules or Cheryl Tyler can be reached on 571-272-6681 or 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/D. C. C./  
Examiner, Art Unit 3744  
28 May 2009

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/Frantz F. Jules/

Supervisory Patent Examiner, Art Unit 3744